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GLENN PATENT GROUP 3475 EDISON WAY, SUITE L MENLO PARK, CA 94025			SHANNON, MICHAEL R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,232

Applicant(s)

FOSTER, MARK J.

Examiner

Michael R Shannon

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-89 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-89 is/are rejected.
- 7) ☒ Claim(s) 44 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20010316, 20020926</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 10-12, 15-27, 31, 35, 39, 42-53, 57-60, 64-67, 71, 75, 79, and 82-89 are rejected under 35 U.S.C. 102(e) as being anticipated by Alonso et al (US patent 6,184,878), cited by examiner.

Regarding claim 1, the claimed method for delivering video to a set top box is met as follows:

- The claimed step of “rendering a page image in a head-end based on a page description written in a page description language” is met by the discussion of converting HTML pages into a “video page” [col. 5, lines 2-5].
- The claimed step of “creating a page image description frame according to said page image” is met by the aforementioned discussion of converting HTML pages into a “video page” [col. 5, lines 2-5].

- The claimed step of “sending the page image description frame to a set top box” is met by the Forward Channel FC [Fig. 1], which sends the “video pages” to the STB [col. 3, lines 33-35].
- The claimed step of “receiving the page image description frame in said set top box” is met by the discussion of the STB receiving and demodulating the information stream [col. 3, line 66 – col. 4, line 1].
- The claimed step of “painting the page image description frame in a display memory in said set top box” is met by the “scratch pad” memory [col. 9, lines 8-15], which serves as a temporary storage for data to be output to display.
- The claimed step of “receiving a video signal in said head end” is met by the discussion of the streaming video portion of the web page being dynamically updated at the STB [col. 9, lines 8-28].
- The claimed step of “forwarding said video signal to said set top box” is met by the same aforementioned discussion of the streaming video portion [col. 9, lines 8-28].
- The claimed step of “receiving said video signal in said set top box” is met by the same aforementioned discussion of the streaming video portion [col. 9, lines 8-28].
- The claimed step of “rendering a video image in said display memory in said set top box based on the video signal” is met by the “scratch pad”

memory [col. 9, lines 8-15], which serves as a temporary storage for data to be output to display.

Regarding claim 2, the claimed “video signal received in the head end [being] a compressed digital video stream” is met by HTML-to-MPEG2 video compiler [col. 5, line 60 – col. 6, line 7].

Regarding claim 3, the claimed “compressed digital video stream [being] an MPEG stream” is met by the aforementioned HTML-to-MPEG2 video compiler [col. 5, line 60 – col. 6, line 7].

Regarding claim 4, the claimed “page image description frame [being] sent to and received by the set top box as a digital image” is met by the discussion of static information structures being sent and processed at the STB [col. 8, lines 22-26].

Regarding claim 5, the claimed “page image description frame [being] sent to and received by the set top box as a video signal” is met by the discussion of the MPEG2 bitstream being used to transmit “video pages” [col. 5, lines 2-15].

Regarding claim 6, the claimed “video signal received in the set top box [being] received on a multi-state modulated radio frequency carrier” is met by the discussion of the Forward Channel FC being a cable, satellite, or terrestrial broadcast network [col. 3, lines 33-36].

Regarding claim 10, the claimed “video signal received in the set top box [being] received on a data channel” is met by the discussion of the Forward Channel FC being a cable, satellite, or terrestrial broadcast network [col. 3, lines 30-36].

Regarding claim 11, the claimed "video signal received in the set top box [being] a compressed digital video stream" is met by the discussion of the MPEG2 bitstream being used to send MPEG2 compressed video to the STB [col. 5, lines 9-15].

Regarding claim 12, the claimed "compressed digital video stream [being] an MPEG stream" is met by the discussion of the MPEG2 bitstream being used to send MPEG2 compressed video to the STB [col. 5, lines 9-15].

Regarding claim 15, the claimed step of "determining in the head end the extents of the video presentation window included in the page description" is met by the "location indicia" that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36]. The claimed steps of "sending the extents to the set top box and receiving the extents in the set top box" are met by the discussion of the Forward Channel FC [Fig. 1] being used to transmit the "video pages" and indicia to the STB [col. 5, lines 9-15].

Regarding claim 16, the claimed step of "rendering a video image is accomplished by rendering the video image within the extents received from the head end" is met by the discussion of the clips being merged into the video pages at appropriate locations [col. 8, lines 30-36].

Regarding claim 17, the claimed "extents comprising the size of the video presentation window and the location of one corner of the window within the page image" is met by the same discussion of the "location indicia" that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36].

Regarding claim 18, the claimed “extents comprising the location of a first corner of the video presentation window within the page image and the location of a second corner of the video presentation window within the page image” is met by the aforementioned discussion of the “location indicia” that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36].

Regarding claim 19, the claimed “display memory in said set top box comprises a background plane and an overlay plane and the step of rendering a video image in said display memory is accomplished by writing video frames into said background plane and making the overlay plane transparent in the region corresponding to the video frames written in the background plane” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 20, the claimed “display memory in said set top box comprises a background plane and an overlay plane and the step of rendering a video image in said display memory is accomplished by writing video frames into the overlay plane” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 21, the claimed “display memory in said set top box comprises a background plane and an overlay plane and the step of painting the page image description frame in said display memory is accomplished by writing the page image description frame into said background plane” is met by the discussion of the “scratch

pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 22, the claimed “display memory in said set top box comprises a background plane and an overlay plane and the step of painting the page image description frame in said display memory is accomplished by writing the page image description frame into said overlay plane and making a region of said overlay plane corresponding to a video presentation window transparent” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 23, the claimed “set top box capable of receiving video” is met as follows:

- The claimed “page image receiver that receives a page image frame” is met by the discussion of the STB receiving and demodulating the information stream [col. 3, line 66 – col. 4, line 1].
- The claimed “page image painter that accepts the page image frame and creates an image of said frame in a display memory” is met by the “scratch pad” memory [col. 9, lines 8-15], which serves as a temporary storage for data to be output to display.
- The claimed “video signal receiver that receives a video signal” is met by the discussion of the streaming video portion of the web page being dynamically updated at the STB [col. 9, lines 8-28].

- The claimed “video image render engine that accepts the video signal and creates successive frame images in said display memory that correspond to said video signal” is met by the “scratch pad” memory [col. 9, lines 8-15], which serves as a temporary storage for data to be output to display.

Regarding claim 24, the claimed “page image receiver receives the page image frame as a digital image” is met by the discussion of static information structures being sent and processed at the STB [col. 8, lines 22-26].

Regarding claim 25, the claimed “page image receiver receives the page image frame as a video signal” is met by the discussion of the MPEG2 bitstream being used to transmit “video pages” [col. 5, lines 2-15].

Regarding claim 26, the claimed “page image receiver comprises a digital data interface” is met by the discussion of the Forward Channel FC being a cable, satellite, or terrestrial broadcast network [col. 3, lines 30-36].

Regarding claim 27, the claimed “tuner for selectively receiving radio frequency modulated carriers, the multi-state demodulator that receives a multi-state modulated carrier from the tuner and demodulates said carrier into a serial data stream containing a plurality of data channels and the program selector that extracts a specific data channel containing the page image” is met by the inherent discussion of a tuning and demodulating system and the application which is incorporated by reference (now patent number 6,226,794) on column 3, line 60 – column 4, line 7.

Regarding claim 31, the claimed “tuner for selectively receiving radio frequency modulated carriers, the multi-state demodulator that receives a multi-state modulated

Art Unit: 2614

carrier from the tuner and demodulates said carrier into a serial data stream containing a plurality of video program channels, and the program selector that extracts a specific video program channel containing the page image" is met by the same aforementioned inherent discussion of a tuning and demodulating system and the application which is incorporated by reference (now patent number 6,226,794) on column 3, line 60 – column 4, line 7.

Regarding claim 35, the claimed "tuner for selectively receiving radio frequency modulated carriers, the multi-state demodulator that receives a multi-state modulated carrier from the tuner and demodulates said carrier into a serial data stream containing a plurality of video program channels, and the program selector that extracts a specific video program channel containing the page image" is met by the same aforementioned inherent discussion of a tuning and demodulating system and the application which is incorporated by reference (now patent number 6,226,794) on column 3, line 60 – column 4, line 7.

Regarding claim 39, the claimed "video signal receiver receives a compressed digital video stream" is met by the discussion of the MPEG2 bitstream being used to transmit "video pages" [col. 5, lines 2-15].

Regarding claim 42, the claimed "compressed digital video stream [being] an MPEG stream" is met by the aforementioned discussion of the MPEG2 bitstream being used to transmit "video pages" [col. 5, lines 2-15].

Regarding claim 43, the claimed "video image render engine accepts display extents and creates said frame images in said display memory within the display

Art Unit: 2614

extents” is met by the discussion of the clips being merged into the video pages at appropriate location indicia [col. 8, lines 30-36].

Regarding claim 44, the claimed “display extents comprising the size of the video presentation window and the location of one corner of the window within the page image” is met by the same discussion of the “location indicia” that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36].

Regarding claim 45, the claimed “display extents comprising the location of a first corner of the video presentation window within the page image and the location of a second corner of the video presentation window within the page image” is met by the aforementioned discussion of the “location indicia” that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36].

Regarding claim 46, the claimed “display memory comprising a background plane and an overlay plane and the video image render engine writes video frames into said background plane and makes the overlay plane transparent in the region corresponding to the video frames written in the background plane” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 47, the claimed “display memory comprising a background plane and an overlay plane and the video image render engine writes video frames into said into the overlay plane” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 48, the claimed “display memory comprising a background plane and an overlay plane and wherein the page image painter writes the page image frame into the background plane” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 49, the claimed “display memory comprising a background plane and an overlay plane and wherein the page image painter writes the page image frame into the overlay plane and wherein the overlay plane is made transparent in a region corresponding to a video window” is met by the discussion of the “scratch pad” memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 50, the claimed “head end for distributing video to a set top box” is met as follows:

- The claimed “page image render unit that accepts a page description written in a page description language and creates a page image frame according to the description” is met by the discussion of converting HTML pages into a “video page” [col. 5, lines 2-5].
- The claimed “page image transmitter that conveys the page image frame to the distribution system” is met by the Forward Channel FC [Fig. 1], which sends the “video pages” to the STB [col. 3, lines 33-35].
- The claimed “video routing unit that receives video signals and forwards the video signals to a distribution system” is met by the discussion of the

streaming video portion of the web page being sent through the head-end and dynamically updated at the STB [col. 9, lines 8-28].

Regarding claim 51, the claimed "video signal received by the video routing unit comprises a compressed digital video stream" is met by the HTML-to-MPEG2 video compiler [col. 5, line 60 – col. 6, line 7].

Regarding claim 52, the claimed "compressed digital video stream is an MPEG stream" is met by the HTML-to-MPEG2 video compiler [col. 5, line 60 – col. 6, line 7].

Regarding claim 53, the claimed "page image transmitter being a multi-state modulator" is met by the Forward Channel FC being a cable, satellite, or terrestrial broadcast network [col. 3, lines 33-36].

Regarding claim 57, the claimed "system for delivering video to a set top box" is met as follows:

- The claimed head-end unit that comprises a "page image render unit that accepts a page description written in a page description language and creates a page image frame according to the description" is met by the discussion of converting HTML pages into a "video page" [col. 5, lines 2-5].
- The claimed head-end unit that comprises a "page image transmitter that conveys the page image frame to the distribution system" is met by the Forward Channel FC [Fig. 1], which sends the "video pages" to the STB [col. 3, lines 33-35].

- The claimed head-end unit that comprises a “video routing unit that receives video signals and forwards the video signal to the distribution system” is met by the discussion of the streaming video portion of the web page being sent through the head-end and dynamically updated at the STB [col. 9, lines 8-28].
- The claimed set top box that comprises a “page image receiver that receives a page image frame” is met by the discussion of the STB receiving and demodulating the information stream [col. 3, line 66 – col. 4, line 1].
- The claimed set top box that comprises a “page image painter that accepts the page image frame and creates an image of said frame in a display memory” is met by the “scratch pad” memory [col. 9, lines 8-15], which serves as a temporary storage for data to be output to display.
- The claimed set top box that comprises a “video signal receiver that receives a video signal” is met by the discussion of the streaming video portion of the web page being dynamically updated at the STB [col. 9, lines 8-28].
- The claimed set top box that comprises a “video image render engine that accepts the video signal and creates successive frame images in said display memory that correspond to said video signal” is met by the “scratch pad” memory [col. 9, lines 8-15], which serves as a temporary storage for data to be output to display.

Regarding claim 58, the claimed "video signal received by the video routing unit comprises a compressed digital video stream" is met by the HTML-to-MPEG2 video compiler [col. 5, line 60 – col. 6, line 7].

Regarding claim 59, the claimed "compressed digital video stream [being] an MPEG stream" is met by the HTML-to-MPEG2 video compiler [col. 5, line 60 – col. 6, line 7].

Regarding claim 60, the claimed "page image transmitter [being] a multi-state modulator" is met by the Forward Channel FC being a cable, satellite, or terrestrial broadcast network [col. 3, lines 33-36].

Regarding claim 64, the claimed "page image receiver receiving the page image frame as a digital image" is met by the discussion of static information structures being sent and processed at the STB [col. 8, lines 22-26].

Regarding claim 65, the claimed "page image receiver receiving the page image frame as a video signal" is met by the discussion of the MPEG2 bitstream being used to transmit "video pages" [col. 5, lines 2-15].

Regarding claim 66, the claimed "page image receiver comprising a digital data interface" is met by the discussion of the Forward Channel FC being a cable, satellite, or terrestrial broadcast network [col. 3, lines 30-36].

Regarding claim 67, the claimed "tuner for selectively receiving radio frequency modulated carriers, the multi-state demodulator that receives a multi-state modulated carrier from the tuner and demodulates said carrier into a serial data stream containing a plurality of data channels, and the program selector that extracts a specific data

Art Unit: 2614

channel containing the page image” are met by the inherent discussion of a tuning and demodulating system and the application which is incorporated by reference (now patent number 6,226,794) on column 3, line 60 – column 4, line 7.

Regarding claim 71, the claimed “tuner for selectively receiving radio frequency modulated carriers, the multi-state demodulator that receives a multi-state modulated carrier from the tuner and demodulates said carrier into a serial data stream containing a plurality of video program channels, and the program selector that extracts a specific video program channel containing the page image” are met by the inherent discussion of a tuning and demodulating system and the application which is incorporated by reference (now patent number 6,226,794) on column 3, line 60 – column 4, line 7.

Regarding claim 75, the claimed “tuner for selectively receiving radio frequency modulated carriers, the multi-state demodulator that receives a multi-state modulated carrier from the tuner and demodulates said carrier into a serial data stream containing a plurality of video program channels, and the program selector that extracts a specific video program channel containing the page image” are met by the inherent discussion of a tuning and demodulating system and the application which is incorporated by reference (now patent number 6,226,794) on column 3, line 60 – column 4, line 7.

Regarding claim 79, the claimed “video signal receiver receiving a compressed digital video stream” is met by the discussion of the MPEG2 bitstream being used to transmit “video pages” [col. 5, lines 2-15].

Regarding claim 82, the claimed "compressed digital video stream is an MPEG stream" is met by the discussion of the MPEG2 bitstream being used to transmit "video pages" [col. 5, lines 2-15].

Regarding claim 83, the claimed "video image render engine accepting display extents and creating said frame images in said display memory within the display extents" is met by the discussion of the clips being merged into the video pages at appropriate location indicia [col. 8, lines 30-36].

Regarding claim 84, the claimed "display extents comprising the size of the video presentation window and the location of one corner of the window within the page image" is met by the same discussion of the "location indicia" that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36].

Regarding claim 85, the claimed "display extents comprising the location of a first corner of the video presentation window within the page image and the location of a second corner of the video presentation window within the page image" is met by the aforementioned discussion of the "location indicia" that mark the position of any dynamic information structures (such as video clips) [col. 8, lines 30-36].

Regarding claim 86, the claimed "display memory comprising a background plane and an overlay plane and the video image render engine writes video frames into said background plane and makes the overlay plane transparent in the region corresponding to the video frames written in the background plane" is met by the discussion of the "scratch pad" memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Art Unit: 2614

Regarding claim 87, the claimed "display memory comprising a background plane and an overlay plane and the video image render engine writes video frames into said into the overlay plane" is met by the discussion of the "scratch pad" memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 88, the claimed "display memory comprising a background plane and an overlay plane and wherein the page image painter writes the page image frame into the background plane" is met by the discussion of the "scratch pad" memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Regarding claim 89, the claimed "display memory comprising a background plane and an overlay plane and wherein the page image painter writes the page image frame into the overlay plane and wherein the overlay plane is made transparent in a region corresponding to a video window" is met by the discussion of the "scratch pad" memory being used to store a background and foreground before output to the viewing device [col. 9, lines 8-15].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-9, 13-14, 28-30, 32-34, 36-38, 40-41, 54-56, 61-63, 68-70, 72-74, 76-78, and 80-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alonso et al (US patent 6,184,878), cited by examiner, in view of Anderson et al (US patent 6,226,794), cited by examiner.

Regarding claims 7, 28, 32, 36, 54, 61, 68, 72, and 76, Alonso teaches all of that which is discussed above with regards to claims 6, 27, 31, 35, 53, 60, 67, 71, and 75, respectively. Alonso does not teach the idea of radio frequency carrier waves being transmitted and received through the use of phase variation techniques. The Anderson reference teaches a system which utilizes QPSK modulation techniques to transmit information to the set top box [col. 2, lines 3-8]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize QPSK teachings, in order to utilize common standards in the art and allow information to be transmitted and received according to set standards and techniques.

Regarding claims 8, 29, 33, 37, 55, 62, 69, 73, and 77, Alonso teaches all of that which is discussed above with regards to claims 6, 27, 31, 35, 53, 60, 67, 71, and 75, respectively. Alonso does not teach the idea of radio frequency carrier waves being transmitted and received through the use of amplitude variation techniques. The Anderson reference teaches a system which utilizes QAM modulation techniques to transmit information to the set top box [col. 2, lines 3-8]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize QAM teachings, in order to utilize common standards in the art and allow information to be transmitted and received according to set standards and techniques.

Art Unit: 2614

Regarding claims 9, 30, 34, 38, 56, 63, 70, 74, and 78, Alonso teaches all of that which is discussed above with regards to claims 6, 27, 31, 35, 53, 60, 67, 71, and 75, respectively. Alonso does not teach the idea of radio frequency carrier waves being transmitted and received through the use of amplitude and phase variation techniques. The Anderson reference teaches a system which utilizes QPSK and QAM modulation techniques to transmit information to the set top box [col. 2, lines 3-8]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize QPSK and QAM teachings, in order to utilize common standards in the art and allow information to be transmitted and received according to set standards and techniques.

Regarding claim 13, Alonso teaches all of that which is discussed above with regards to claim 1. Alonso, however, does not teach that the claimed "step of rendering a video image in said display memory is accomplished by: extracting a sequence of compressed digital image frames from the video signal received in the set top box and directing the sequence of compressed digital image frames to a hardware decompressor that reconstitutes non-compressed digital image frames and writes the non-compressed digital image frames to a graphics memory". The Anderson reference teaches that a program stream is coupled to the compressed video decoder 160 and utilizes RAM 162 and 164 to uncompress the digital image frames and write the information into RAM 162 and 164 before display [col. 5, lines 29-37]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the MPEG decoder as taught by Anderson, in order to allow the system to decode and

Art Unit: 2614

therefore process compressed video streams and work with them in memory prior to display.

Regarding claim 14, Alonso teaches all of that which is discussed above with regards to claim 1. Alonso, however, does not teach that the claimed "step of rendering a video image in said display memory is accomplished by: extracting a sequence of compressed digital image frames from the video signal received in the set top box and directing the sequence of compressed digital image frames to a software decompressor that reconstitutes non-compressed digital image frames and writes the non-compressed digital image frames to a graphics memory". The Anderson reference teaches that a program stream is coupled to the compressed video decoder 160 (an MPEG decoder, which is commonly a software decoder) and utilizes RAM 162 and 164 to uncompress the digital image frames and write the information into RAM 162 and 164 before display [col. 5, lines 29-37]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the MPEG decoder as taught by Anderson, in order to allow the system to decode and therefore process compressed video streams and work with them in memory prior to display.

Regarding claim 40, Alonso teaches all of that which is discussed above with regards to claim 39. Alonso, however, does not teach that the claimed "video image render engine further comprises a hardware decompressor that: accepts a sequence of compressed digital image frames from the video signal receiver, reconstitutes non-compressed digital image frames, and writes the non-compressed digital image frames to the display memory". The Anderson reference teaches that a program stream is

Art Unit: 2614

coupled to the compressed video decoder 160 and utilizes RAM 162 and 164 to uncompress the digital image frames and write the information into RAM 162 and 164 before display [col. 5, lines 29-37]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the MPEG decoder as taught by Anderson, in order to allow the system to decode and therefore process compressed video streams and work with them in memory prior to display.

Regarding claim 41, Alonso teaches all of that which is discussed above with regards to claim 39. Alonso, however, does not teach that the claimed "video image render engine further comprises a software decompressor that: accepts a sequence of compressed digital image frames from the video signal receiver; reconstitutes non-compressed digital image frames; and writes the non-compressed digital image frames to the display memory". The Anderson reference teaches that a program stream is coupled to the compressed video decoder 160 (an MPEG decoder, which is commonly a software decoder) and utilizes RAM 162 and 164 to uncompress the digital image frames and write the information into RAM 162 and 164 before display [col. 5, lines 29-37]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the MPEG decoder as taught by Anderson, in order to allow the system to decode and therefore process compressed video streams and work with them in memory prior to display.

Regarding claim 80, Alonso teaches all of that which is discussed above with regards to claim 79. Alonso, however, does not teach that the claimed "video image

Art Unit: 2614

render engine further comprises a hardware decompressor that: accepts a sequence of compressed digital image frames from the video signal receiver, reconstitutes non-compressed digital image frames, and writes the non-compressed digital image frames to the display memory". The Anderson reference teaches that a program stream is coupled to the compressed video decoder 160 and utilizes RAM 162 and 164 to uncompress the digital image frames and write the information into RAM 162 and 164 before display [col. 5, lines 29-37]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the MPEG decoder as taught by Anderson, in order to allow the system to decode and therefore process compressed video streams and work with them in memory prior to display.

Regarding claim 81, Alonso teaches all of that which is discussed above with regards to claim 79. Alonso, however, does not teach that the claimed "video image render engine further comprises a software decompressor that: accepts a sequence of compressed digital image frames from the video signal receiver, reconstitutes non-compressed digital image frames, and writes the non-compressed digital image frames to the display memory". The Anderson reference teaches that a program stream is coupled to the compressed video decoder 160 (an MPEG decoder, which is commonly a software decoder) and utilizes RAM 162 and 164 to uncompress the digital image frames and write the information into RAM 162 and 164 before display [col. 5, lines 29-37]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the MPEG decoder as taught by Anderson, in order to allow the

Art Unit: 2614

system to decode and therefore process compressed video streams and work with them in memory prior to display.

Claim Objections

5. Claims 44 and 45 are objected to because of the following informalities: "Claim 3" is an apparent typographical error. For the purposes of the art rejection above, this typo is corrected to read "Claim 23", and should be officially corrected in response to this office action. Appropriate correction is required.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lemmons et al (US patent 6,442,755) disclose a system for parsing and interpreting an HTML document to produce display screens of EPG information.

Rainville et al (US publication 20020069411) disclose a system for using WWW pages and television signals simultaneously on a display using PIP.

Zigmond et al (US patent 6,785,902) disclose a system for integrating television signals into WWW pages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R Shannon whose telephone number is 703-305-6955. The examiner can normally be reached on M-F 7:30-5:00, alternate Friday's off.


Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 703-305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael R Shannon
Examiner
Art Unit 2614

Michael R Shannon
February 17, 2005


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600